

**§ 32.60-1 Scantlings, material, and workmanship—TB/ALL.**

(a) All tank vessels, the construction or conversion of which is started on or after July 1, 1951, shall conform to the requirements in this subpart in construction of hulls. The hull and deckhouses shall be of steel or iron construction except that the pilothouse and decks over quarters may be constructed of wood. Scantlings, material, and workmanship, subdivision of cargo spaces, fitting of cofferdams, and testing of tanks shall be at least equivalent to the requirements of the American Bureau of Shipping or other recognized classification society.

(b) See subpart 32.57 for structural fire protection requirements for tank vessels contracted for on or after January 1, 1963.

**§ 32.60-5 Subdivision of cargo space—TB/ALL.**

The cargo space shall be divided into tight compartments as necessary to avoid excessive stresses and to provide stability.

**§ 32.60-10 Segregation of cargo; Grade A, B, C, or D—TB/ALL.**

(a) *General.* The galleys, living quarters, navigation spaces, general cargo spaces, boiler rooms, and enclosed spaces where sources of vapor ignition are normally present, shall be segregated from cargo tanks by cofferdams or pump rooms or tanks, either empty or used to carry liquid having a flashpoint of 150° F. or above, or deck spaces enclosed or open.

(b) *Cargo tank spaces.* Cargo tank spaces shall extend to the main deck, with hatches and vents located on the weather deck. Liquids having a flash point of not less than 150° F. may be carried in the bulk tanks located beyond the segregating cofferdams and/or pump rooms.

(c) *Enclosed spaces.* (1) Cargo and vent piping passing through enclosed spaces immediately above the bulk cargo tanks shall be continuous except that flanged joints connecting pipe sections will be permitted.

(2) No openings to cargo tank shall be permitted other than stuffing boxes through which valve control rods or permanently installed gage tapes ex-

tend and openings for use of tank cleaning machines. Openings for tank cleaning machines, when not in use, shall be kept closed by means of gastight bolted plates and when in use shall be made essentially gas and watertight by covers through which hose or pipe to the tank cleaning machines extend.

(3) The overhead in way of quarters shall be gastight.

(d) *Stowage spaces.* The spaces described in paragraph (c) of this section may be used for stowage purposes and for general cargo provided that adequate ventilation is furnished.

(e) *Openings.* (1) Except as provided in paragraph (c) of this section, there shall be no manholes or other openings from cargo tanks to any other enclosed spaces. An exception may be made to allow direct access from cargo tanks to innerbottoms through gas tight bolted manholes, provided:

(i) The innerbottom tanks are voids or ballast tanks only, and

(ii) The innerbottom tanks are protected from sources of ignition similar to the cargo tanks, and any bilge or ballast pumping system serving the innerbottom tanks are treated like cargo pumping systems.

(2) Any vents, sounding tubes, and similar piping passing through such tanks shall be run in a suitable trunk; or such piping shall have a wall thickness equal to or greater than the innerbottom plating, but not less than schedule 80, and shall be welded continuously on both sides of the innerbottom plating.

[CGFR 65-50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 69-72, 34 FR 17481, Oct. 29, 1969]

**§ 32.60-15 Segregation of cargo; Grade E—TB/ALL.**

(a) *General.* The galleys, living quarters, navigation spaces, general cargo spaces, boilerrooms, and enclosed spaces containing machinery, where sources of vapor ignition are normally present, shall be segregated from the cargo tanks by tight bulkheads and intervening spaces are not required.

(b) *Cargo tank spaces.* Cargo tank spaces can be terminated at any deck with hatches on the same deck, but the vent lines shall be extended to the